MOTOVILOV, V.V.; POLYAKOVA, N.A.

Currents and voltages in a zero sequence power-directing relay with single-phase closings in a compensated network. Izv.vys. ucheb.zav.; energ. 2 no.12:1-10 D '59. (MIRA 13:5)

1. Kuybyshevskiy industrial'nyy institut imeni V.V. Kuybysheva. Predstavlena kafedroy elektricheskikh stantsiy.
(Short circuit) (Electric networks)

POLYAKOVA, Nadezhda Arsen'yevna, kand. ekonom. nauk; MIRONOV, S.Ya., red.; YUZBASHEV, V.G., red.; NAZAROVA, A.S., tekhn. red.

[Principal path of the development of agriculture]Glavnyi put' razvitiia sel'skogo khoziaistva. Moskva, Izd-vo "Znanie," 1962. 36 p. (Novoe v zhizni, nauke, tekhnike. III Seriia: Ekonomika, no.22) (MIRA 15:11)
(Agriculture)

MARKOV, N.A., dotsent, kand.tekhn.nauk; POLYAKOVA, N.A., dotsent, kand.tekhn.nauk

Calculation of currents in operational short-circuits of three-phase electric arc furnaces. Elektrichestvo no.2;28-33 F '61. (MIRA 14:3)

1. Kuybyshevskiy industrial'nyy institut.
(Electric furnaces)

S/143/61/000/011/002/009
D223/D302

9,8200

AUTHORS: Motovilov, V. V. and Polyakova, N. A., Candidates of Technical Sciences, Docents

TITLE: An installation for semiautomatic connection of several telesignalling points with one dispatching semi-unit

PERIODICAL: Izvestiya vysshikh uchebnykh zavendeniy. Energetika no. 11, 1961, 12-15

TEXT: The installation proposed by the authors is intended for all telesignalling systems using a physical line as a connecting channel. A diagram of the system is given and its operation described. The systems consists of several relays connecting corresponding lines with the semi-unit. A method of design, devised for telesignalling devices with amplitude - pole choice and a.c. supply is also described. This article was recommended by the Kafedra elektricheskikh stantsii (Department of Power Stations). There are 3 figures.

Card 1/2

S/143/61/000/011/002/009
D223/D302

ASSOCIATION: Kuybyshevskiy industrialnyy institut imeni V. V. Kuybysheva (Kuybyshev Industrial Institute imeni V. V. Kuybyshev)

SUBMITTED: April 8, 1961

Card 2/2

MOTOVILOV, V. V., kand. tekhn. nauk, dotsent; POLYAKOVA, N. A., kand. tekhn. nauk, dotsen'

Remote signaling system for close range operation in conjunction with a telemetering system. Izv. vys. ucheb. zav.; energ. 7 no.5: 99-103 My '64. (MIRA 17:7)

1. Kubyshevskiy politekhnicheskiy institut imeni Kuybysheva. Predstavlena kafedroy elektricheskikh stantsiy.

S/143/62/000/006/002/008
D238/D308

AUTHORS: Motovilov, V. V. and Polyakova, N. A., Candidates of Technical Sciences, Docents

TITLE: Telesignalling devices operating on three and six signals

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 6, 1962, 9-15

TEXT: Telesignalling equipment has been designed for transmitting 3-6 signals along physical communication lines to a distance of 10-15 km. The telesignalling sets comprise two units, a dispatcher station and a signalling station with line connections. The polar attribute is employed for signal transmission or amplitude-polar attribute in the case of the 6-signal device. The system has a 60 - 220 V a.c. supply which can be applied at either end according to the local conditions. The 3-signal system employing the polar attribute transmits the first signal on positive d.c., the second on negative d.c. and the third with positive and negative d.c.

Card 1/2

Telesignalling devices operated ...

simultaneously. The signals are arranged so that the third is the least important, since only the first and second can be transmitted simultaneously. The 6-signal system has two sets of relays with different sensitivity. Currents at two amplitudes are introduced at the signalling station by a simple resistance. The experimental model was built on a horizontal chassis with a sloping front panel. Performance tests indicate that signals are reliably received with line resistances fluctuating from 0 to 3000 ohms and with supply voltages from 40 to 110 V. The devices are recommended for simplicity and reliability in converting supply substances for urban networks and industrial distribution systems. There are 7 figures.

ASSOCIATION: Kuybyshevskiy industrial'nyy institut imeni V. V. Kuybysheva (Kuybyshev Industrial Institute imeni V. V. Kuybyshev)

SUBMITTED: March 6, 1961

Card 2/2

MARKOV, N.A., kand.tekhn.nauk, dotsent; POLYAKOVA, N.A., kand.tekhn.nauk, dotsent

Method for calculating nonsymmetrical three-phase networks for electric arc furnace systems. Elektrichestvo no.2:33-37 F '62. Elektrichestvo no.2:33-37 F '62. (MIRA 15:2)

1. Kuybyshevskiy industrial'nyy institut.
(Electric furnaces)
(Electric networks)

MOTOVILOV, V.V., kand.tekhn.nauk, dotsent; POLYAKOVA, N.A., kand.tekhn.nauk, dotsent

Distance-type signaling device for local communication with increased capacity permitting transmission of telephone messages. Izv. vys. ucheb. zav.; energ. 6 no.10:115-119 O '63. (MIRA 16:12)

1. Kuybyshevskiy industrial'nyy institut imeni V.V.Kuybysheva. Predstavlena kafedroy elektricheskikh stantsiy.

[illegible], N. A.

SIN'KOV, V. M.; YEGOROV, YU. V., Eng; POLYAKOVA, N. A., Eng.

Electric Circuits

Protection schemes for alternative operating current. Elek. sta. 23 no. 8, 1952.

Monthly List of Russian Accessions. Library of Congress, November 1952. UNCLASSIFIED.

YEFIMOV, Anatoliy Nikolayevich, prof., doktor ekonomicheskikh nauk; POLYAKOVA, N.A., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Specialization in industrial production and the economics of enterprises] Spetsializatsiia promyshlennogo proizvodstva i ekonomika predpriiatiia. Moskva, Izd-vo "Znanie," 1958. 39 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.3, no.39) (MIRA 12:2)
(Industry)

POLYAKOVA, N. A.

1263. Ispol'zovaniye zemli kak osnovnogv sredstva sel'skokhozyastvennogo proizvodstva v kolkhozakh. M., 1954. 15s. 21sm. (Mosk. ordena Lenina gos. un-t im. M. V. Lomonosova Kafedra ekonomiki i planirovaniya Nar. khozyaystva SSSR). 100 ekz. B. ts. -- [54-53685]

SO: Knizhnaya Letopis, Vol. 1, 1955

POLYAKOVA, N. A.

"The Protection of Steel-Smelting Electric Arc Furnaces From Short Circuits and Overloading." Cand Tech Sci, Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov, Min Higher Education USSR, Moscow, 1955. (KL, No 10, Mar 55)

SO: Sum. No. 670, 29 Sep 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

1. Kondorskaya, N.B.

2. USSR (600)

4. ARTERIOSCLEROSIS

7. Reactivity of peripheal blood vessels to vasoconstrictors in experimental cholesterin atherosclerosis. Trudy Vses. obshch. fiz, biokhm. i farm. no.1, 1952

9. Monthly List of Russian Accessions. Library of Congress, March 1953 Unclassified

POLYAKOVA-KONDORSKAYA, N.B.

PAVLOVA, N.Ya.; MYAZDRIKOVA, A.A.; SAMOYLOVA, Z.T.; POLYAKOVA-KONDORSKAYA, N.B.; MIRZOYAN, S.A.; MENTOVA, V.

Pharmacology and Toxicology Section of the Moscow Society of Physiologists, Biochemists and Pharmacologists. Farm.i toks. 16 no.1:59-60 Ja-F '53. (MLRA 6:6)

1. I MOLMI (for Pavlova, Myazdrikova and Polyakova-Kondorskaya). 2. Institut terapii Akademii meditsinskikh nauk SSSR (for Samoylova). 3. Yerevanskiy meditsinskiy institut (for Mirzoyan).
(Pharmacology--Societies) (Physiology--Societies) (Biochemistry--Societies)

POLYAKOVA, N. B.

"The Effect of the Central Nervous System on the Reactivity of the Peripheral Blood Vessels to Vasoconstrictive Substances Under Normal Conditions and During Experimental Atherosclerosis." Cand Med Sci, First Moscow Medical Inst; Ryazan' Medical Inst, Ryazan', 1954. (RZhBiol, No 5, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

POLYAKOVA (Kondorskaya), N.B.

Effect of the nervous system on changes in the reactivity of the peripheral blood vessels to vasoconstrictors in experimental cholesterol atherosclerosis. Trudy Vses. ob-va fiziol., biokhim. i farm. 3:128-133 '56 (MLRA 10:4)

1. Kafedra farmakologii Ryazanskogo meditsinskogo instituta im. I. P. Pavlova; zaveduyushchiy kafedroy professor G.A. Ponomarev.
(ARTERIOSCLEROSIS) (BLOOD VESSELS) (NERVOUS SYSTEM)
(VASOMOTOR DRUGS)

KUDRIN, A.N.; KOST, A.N.; YERSHOV, V.V.; TROSHINA, A.Ye.; POLYAKOVA, N.B.; USPENSKIY, V.A.; TERENT'YEV, P.B.; YAKOVLEVA, I.A.

Pharmacology of new β-dialkylamino ketones. Farm. i toks. 25 no.4: 437-444 Jl-Ag '62. (MIRA 17:10)

1. Kafedra farmakologii (zav. - prof. A.N. Kudrin) Ryazanskogo meditsinskogo instituta imeni Pavlova i laboratoriya spetsial'nogo organicheskogo sinteza (zav. - chlen-korrespondent AN SSSR A.P. Terent'yev) Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.

POLYAKOVA, N.B.

Effect of small doses of stelazine on the behavior of young animals. Vop.klin., patog. i lech. shiz. no.1:113-117 '64. (MIRA 18:5)

1. Otdel psikhofarmakologii (zav. - kand.med.nauk G.Yu.Avrutskiy) Gosudarstvennogo nauchno-issledovatel'skogo instituta psikhiatrii Ministerstva zdravookhraneniya RSFSR.

KUDRIN, A.N., prof.; KAZBERYUK, N.A.; NIKULIN, A.A.; POLYAKOVA, N.B.; TROSHINA, A.Ye.; USPENSKIY, V.A.

[Prescription manual] Spravochnik po retsepture; uchebnoe posobie. Riazan', Riazanskii med. in-t, 1962. 265 p. (MIRA 16:12)

(PRESCRIPTION WRITING)

ZAYTSEV, V. P.; NIKULIN, A. A.; POLYAKOVA, N. B.; SUSNINA, I. V.; TROSHINA, A. Ye.; UZBEKOVA, D. G.; USPENSKIY, V. A.

Proper utilization of medicaments is one of the basic conditions for the further improvement of medical attendance for the population. Zdrav. Ros. Feder. 6 no.8:13-17 Ag '62. (MIRA 15:7)

1. Iz Ryazanskogo oblastnogo aptekoupravleniya (upravlyayushchiy V. P. Zaytsev) i kafedry farmakologii (zav. - dotsent A. A. Nikulin) Ryazanskogo meditsinskogo instituta imeni akademika I. P. Pavlova.

(DRUGS) (MEDICAL CARE)

POLYAKOVA, N.B.

Change in the reactivity of coronary vessels in rabbits hearts in experimental atherosclerosis. Farm.i toks. 23 no.2:130-132 Mr-Ap '60. (MIRA 14:3)

1. Kafedra farmakologii (zav. -prof. A.N.Kudrin) Ryazanskogo meditsinskogo instituta imeni I.P.Pavlova.
(CORONARY HEART DISEASE)

T

USSR / Human and Animal Physiology (Normal and Pathological). Blood.

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60347

Author : Polyakova (Kondorskaya), N. B.
Inst : All-Union Society of Physiologists, Biochemists and Pharmacologists

Title : Influence of the Nervous System Upon the Change in Reactivity of Peripheral Vessels to Vaso-constrictor Substances in Experimental Cholesterol Atherosclerosis

Orig Pub : Tr. Vses. o-va fiziol., biokhim. i farmakologov, 1956, 3, 128-133

Abstract : Changes in arterial lumina of vessels in rabbit ears, isolated by the method of Kravkov-Pisemskiy, brought about by different substances, were measured by the number of drops flowing out of the veins in a unit of time. The ear vessels in healthy rabbits reacted to

Card 1/2

AKINDINOV, I.N.; POLYAKOVA, N.D.

Analyzing the viscosity of feed molasses of Kuban sugar factories. Sakh.prom. 35[i.e. 36] no.2:28-31 F '62. (MIRA 15:4)

1. Krasnodarskiy Nauchno-issledovatel'skiy institut pishchevoy promyshlennosti.
(Kuban--Molasses--Testing)

POLYAKOVA, N.F.

CA

15

Chemical treatment of pepper seeds. A. I. [illegible] and N. F. Polyakova. *Ovoshchevodstvo* 1940, No. 2, 2[illegible]-80.—Chem. treatment destroys infection of the seeds without decreasing their germination ability. The best disinfectant is the new Hg "NIUIF prepn." (1% Hg).

W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Country : USSR
Category : Forestry. Biology and Typology of the Forest. K

Abs Jour : RZhBiol., No 6, 1959, No 24694

Author : Polyakova, N. F.
Inst :
Title : Changes of the Leaf Mass in Oak Tree Stands Due to Age.
Orig Pub : Molodyye lesovody - sorokaletiyu Velikogo Oktyabya. M., 1957, 17-25

Abstract : The study of the leaf apparatus of tree species was conducted in mixed tree stands, 25-220 years old, in Tellermanov Experimental Forestry (Balashovskaya Oblast). It was clarified that the leaf mass in forests of various ages changes, whereupon it attains the maximal weight towards 40-60 years in the period of the stand's intensive growth. The basic leaf mass of all species

Card : 1/4

Country : USSR
Category : Forestry. Biology and Typology of the Forest. K

Abs Jour : RZhBiol., No 6, 1959, No 24694

Author :
Inst :
Title :

Orig Pub :

Abstract : (up to 80 percent) is on trees of the 1st and 2nd classes of growth. The greatest percentage of shaded leaves is observed on trees of the least diameter: 100 percent, at the age of 25 years, and 75 percent, at the age of 40 years. With the increase of the trees' diameter, the quantity of the shaded leaf mass on the oak's tree-top is decreased. With age, in the course

Card : 2/4

level of the leaf mass decreases with age. weight of the leaf mass decreases with age. From the age of 40 years, the over-all surface of the entire leaf mass practically

POLYAKOVA, N. F.

USSR/Biology - Plant Physiology

Card : 1/1

Authors : Polyakova, N. F.

Title : Relation between the foliage mass, growth of wood pulp and transpiration

Periodical : Dokl. AN SSSR, 96, Ed. 6, 1261 - 1263, June 1954

Abstract : A scientific explanation is given regarding the relation between foliage mass, growth of wood pulp and transpiration of various types of pine, oak and birch trees. Six references. Tables, graphs.

Institution : ...

Presented by : Academician V. N. Sukachev, April 17, 1954

POLYAKOVA, N. F.

"Changes in the Foliage Mass of Old Oak Trees In Relation to Age and Felling Care." Cand Agr Sci, Inst of Forestry, Acad Sci USSR, Moscow, 1954. (KL, No 7, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

POLYAKOVA, N.F.

Interrelation between foliage mass, wood increment and transpiration.
Dokl. AN SSSR 96 no.6:1261-1268 Je '54. (MLRA 7:8)

1. Predstavleno akademikom V.N.Sukachevym.
(Botany--Physiology)

FOLYAKOVA, N. F.

"The Botrytis Fungus and Its Role in the Withering of Cabbage Pericarps," Sad i Ogorod, 1950, No. 10.

Mikrobiologiya, Vol. XX, No. 5, 1951.
W-24635

I OLYAKOVA, N. F.

"The Botrytis Fungus and Its Role in the Withering of Cabbage Pericarps", Sad i Ogorod, No. 10, pp 66-68, 1950.

L 15871-66 EWT(d)/EWT(l)/EWP(m)/EWT(m)/EWP(w)/FCC/EWA(d)/EWP(n)/FCS(k)/EWA(h)/ETC(m)-6 IJP(c) WW/EM

ACC NR: AP6004436 SOURCE CODE: UR/0414/65/000/003/0083/0092

AUTHOR: Lyakhov, G. M.(Moscow); Osadchenko, R. A. (Moscow); Polyakova, N. I.(Moscow)

ORG: none

TITLE: Interaction between a shock wave and a moving obstacle in a plastic medium with regard to the effect of the free surface

SOURCE: Fizika goreniya i vzryva, no. 3, 1965, 83-92

TOPIC TAGS: wave mechanics, shock wave propagation

ABSTRACT: The authors consider interaction between a plane compression wave and an obstacle in elastoplastic media taking account of the free surface factor. The medium is described and wave propagation is analyzed with regard to interaction between the wave and the obstacle. The results are analyzed for interaction of nonstationary and stationary waves with an obstacle of infinite mass. Curves are given showing the pressure acting on an obstacle of finite mass for various ratios between the acoustic resistances of the media in front of and behind the obstacle. It is found that the free surface has a more rapid effect in the plastic medium than in

Card 1/2

UDC: 532.593

POLYAKOVA, N. I., Candidate of Agric Sci (diss) -- "The dependence of the harvest and quality of spring wheat seed on sowing times under conditions of the forest steppe in Omsk Oblast". Frunze, 1959. 18 pp (Min Agric USSR, Kazakh State Agric Inst), 150 copies (KL, No 20, 1959, 114)

SOV/179-59-2-2/40

AUTHORS: Lyakhov, G. M., Polyakova, N. I. (Moscow)

TITLE: An Approximate Method of Calculation of a Shock Wave and Its Effect (Priblizhennyy metod rascheta udarnykh voln i ikh vzaimodeystviye)

PERIODICAL: Izvestiya Akademii nauk SSSR OTN, Mekhanika i mashinostroyeniye, 1959, Nr 2, pp 13-18 (USSR)

ABSTRACT: The usual method of determining the propagation of a shock wave, based on a system of 3 quasi-linear equations (Eqs 1.1) can only be applied when the conditions at the front of the wave are known. To avoid this difficulty the authors describe a method where the curve defining the compression $p = p(\rho)$ is assumed as composed of a series of straight lines (Eq 1.2). This approximate method of calculation gives a negligible error when the pressure at the front does not exceed 2 to 3 kg/cm^2. In this case the wave equation can be defined as Eq (1.7) and its solution as Eq (1.8), where F_1, F_2 - arbitrary functions, A - velocity of propagation (in the coordinates h, t) corresponding to the acoustic impedance of the medium ρc for a given sector of an approximate isentropy. The propagation of the plane shock wave, the equation of which is given in terms of $p = p(V)$, is

Card 1/3

An Approximate Method of Calculation of a Shock Wave and Its Effect

defined for a cross-section of the medium and based on the conditions Eq (2.1) (p_o , ρ_o - parameters of medium ahead of the front; p, ρ, D, u - at the front). For the curve p = p(V) (broken line in Fig 1), the velocity of the front can be defined as Eq (2.4) and the pressure as Eq (2.6). The motion between the cross-section h = 0 and the front is defined by Eq (1.8). If the cross-sections are sufficiently small, then the calculation can be performed separately for every region as illustrated in Fig 2, i.e. the formulae (2.9) to (2.11) will correspond to regions and Eqs (2.12) and (2.13) to segments, e.g. for the region 3 the corresponding equations will be (2.14) and (2.15). Similarly, the calculation is performed for every region. The reflection of the shock plane wave from a rigid obstruction causes an equilibrium of the entropy in various regions of the medium. This can be expressed by the Eq (3.1) describing the conditions at the front of a reflected wave, where 1 and 2 denote the incident and reflected wave respectively. The

Card 2/3

An Approximate Method of Calculation of a Shock Wave and Its Effect

pressure affecting the obstruction can be calculated from Eq (3.2). The differential equation of motion of the front can be shown as Eq (3.9) and its solution as Eq (3.10), which defines the front line as a curve of the second order. L. I. Sedov and K. P. Stanyukovich are thanked for their advice. There are 2 figures and 3 Soviet references.

SUBMITTED: September 9, 1958.

LYAKHOV, G.M. (Moskva); POLYAKOVA, N.I. (Moskva)

Propagation and interaction of compression and decompression waves in elastic-plastic media. Izv.AN SSSR.Otd.tekh.nauk. Mekh.i mashinostr. no.3:99-108 My-Je '60. (MIRA 13:6)

(Elastic waves)

LYAKHOV, G.M. (Moskva); POLYAKOVA, N.I. (Moskva)

Interaction between a shock wave and a displacive barrier in an elastic-plastic medium. PMTF no.5:89-95 S-O '62.
(MIRA 16:1)

(Shock waves) (Deformations (Mechanics))

S/182/60/000/011/003/016
A161/A029

AUTHORS: Shifrin, M.Yu., Kovalenko, Yu.Ye., Kolesnik, B.P., Polyakova, N.K., Kharkhorin, A.M.

TITLE: Development of Technology for Manufacture of Hollow Axles

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, 1960, No. 11, pp.11-15

TEXT: The problem of hollow axles for rolling stock on railroads could not be solved up to now. The authors have suggested to manufacture hollow axles from hollow rolled blanks and the Uralvagonzavod plant has developed axle designs in cooperation with the Ukrainskiy nauchno-issledovatel'skiy trubnyy institut (Ukrainian Scientific Tube Research Institute) (Fig. 1, axle for plain bearings, Fig. 2, for roller bearings). Experiments were carried out with billets rolled in an automatic tube rolling mill from "45" steel per GOST 1050-57 (GOST 1050-57) standard of the following composition: (%) 0.44 C; 0.63 Mn; 0.25 Si; 0.28 S; 0.021 P; 0.13 Cr. Blanks of 230 mm diameter were pierced in a piercing mill, rolled in an automatic "220" or "400" mill with three passes, then reheated and forged on the ends in an especially designed three-impression die (Fig. 4), or in

Card 1/3

Development of Technology for Manufacture of Hollow Axles

a single-impression die (Fig. 5) for plain or roller bearings, respectively (Fig. 7 and 8). Ends were forged with a mandrel to maintain the hole in the axle trunnions. The axle wall thickness was uneven on account of the twisting of the metal in the piercing process, but this helical line of higher or lower wall thickness did not disbalance the entire axle too much. As wall uneveness can increase on account of buckling of rough axles, straightening of the rough rolled axle must be made obligatory in the manufacturing process. The axles were normalized in a continuous furnace with 840 ± 10°C for 5 h 30 min and cooled in the air. The macrostructure of the trunnions metal was dense and sound with fibers following the axle outline without interruptions and with insignificant segregation of sulfur towards the inner surface. The mechanical properties were above the standard requirements and partly even higher than the mechanical properties of solid axles. The weight of the axles varied between 328 and 348 kg compared with 428 kg of a solid standard axle. When techniques will be improved, the weight of the hollow axle for roller bearings may be further reduced to

S/182/60/000/011/003/016
A161/A029

Development of Technology for Manufacture of Hollow Axles

310-318 kg. The conclusion is drawn that manufacture of hollow axles from rolled blanks by rolling and subsequent forging of the ends is feasible. Fatigue tests of hollow axles are necessary, but a rolling shop project for manufacturing hollow axles may be developed without waiting for the test results, for hollow axle blanks can be produced by existing equipment. The recommended production equipment includes a machine for making hollow blanks, a three-high helical cross rolling mill ("stan poperechno-vintovoy prokatki") and hydraulic presses for forging the axle ends.

Card 3/6

TAYTS, N.Yu., doktor tekhn.nauk; KOLESNIK, B.P., kand.tekhn.nauk; YANKOVSKIY, V.M., kand.tekhn.nauk; KADINOVA, A.S., inzh.; KAUFMAN, M.M., inzh.; Prinimali uchastiye: POLYAKOVA, N.K., inzh.; VOVSINA, A.D., inzh.; SHANINA, A.S., inzh.; KOSTIN, V.I., inzh.

Rapid heat treatment of drill pipes. Stal' 22 no.1:57-60 Ja '62. (MIRA 14:12)

1. Ukrainskiy nauchno-issledovatel'skiy trubnyy institut (for Polyakova).

(Pipe, Steel)
(Steel—Heat treatment)

SHIFRIN, M.Yu.; KOVALENKO, Yu.Ye.; KOLESNIK, B.P.; POLYAKOVA, N.K.; KHARKHORIN, A.M.

Developing a procedure for the manufacture of hollow axles. Kuz.-shtam. proizv. 2 no.11:11-15 N '60. (MIRA 13:10)
(Axles) (Rolling (Metalwork)) (Forging)

USSR / Magnetism. Ferromagnetism F - 4

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9509

Author : Mil'ner, A.S., Polyakova, N.L.
Inst : Not given
Title : The Curie Point in Thin Films of Ferromagnetics

Orig Pub : Uch. zap. kharkovsk. un-t, 1956, 64, 159-165

Abstract : An experimental verification is made of the dependence of the Curie point on the thickness of the nickel films, obtained by the method of spin waves, i.e., the dependence $I_s/I_0 = f(T/\Theta)$ is measured. Films are obtained by evaporation in vacuum on glass from a nickel wire or from a crucible made of aluminum oxide. The film area in all measurements was 27 x 2 cm, and the thickness was measured by the Sinel'nikov and Rapp method. The Curie point was measured from the relative change in the magnetic moment of the film upon increase in temperature. It was established

Card : 1/2

POLYAKOVA, N. L.

C

Changes in fire-clay brick during service in a glassmelting furnace. N. L. POLYAKOVA. *Doklady Akad. Nauk S.S.S.R.*, 75 [1] 99–100 (1950).—Brick were taken from a setting between a fire-clay wall and a silica roof of a pot furnace after 1.5 year's use at 1500° to 1520°C. The charge was soda-lime glass, and fuel gases were from the combustion of peat. The brick showed a zonal structure. The first zone (nearest the melting space) was 2 cm. thick and light blue, with somewhat large pores and conchoidal fracture. It consisted of glass and 0.25 x 0.11-mm. mullite crystals with brown anisotropic inclusions. The most vitrified outer zone consisted of 42% mullite and 58% glass; the index of the glass was 1.510 ± 0.002. The second zone was 7 cm. thick, black, and of densely slagged structure. Because of its high dispersion, the mullite content in this zone was not determined. The index of the glass was 1.500. The third zone was 20 cm. thick and light yellow near the edge of the brick, with original fragmentation appearance. Angular quartz grains, several millimeters in girth, were observed in the main material. This zone had a large number of opaque aggregations of mullitized clay with an index of 1.576 ± 0.005, grains of quartz, and not much brown glass, overfilled with black, opaque inclusions. Chemical analysis indicates migration into the first zone of some oxides, particularly MnO, CaO, and alkali. CaO and Na_2O come from the charge dust, and MnO from the fuel gases. In the first zone, SiO_2 was not less than 7% lower than in the second and third.

B.Z.K.

COMMON ELEMENTS

GLASS INDEX

POLYAKOVA, N. L.

USSR/Chemical Technology - Chemical Products and Their Application. Silicates. Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62297

Author: Bogoroditskiy, N. P., Polyakova, N. L., Kirillova, G. K., Eydel'kind, A. M.

Institution: None

Title: New Varieties of Electrotechnical Ceramics

Original Periodical: Elektrichestvo, 1954, No 7, 56-60

Abstract: Investigations of the structure of ceramics (C) have shown that they must be regarded as a complex system containing crystalline, glassy, amorphous and gaseous phases. It has been found that electric, physical and mechanical properties of C are determined primarily by their crystalline phase. Studies of crystal formations have made it possible to divide electro-ceramics in 3 groups: polycrystals-dielectrics with high or somewhat decreased dielectric properties (presence or absence of relaxation polarization);

Card 1/2

POLYAKOVA, N.L.

USSR/ Physics - Ceramic strength

Card 1/1 Pub. 104 - 6/14

Authors : Polyakova, N. L.; and Mikhaylova, I. P.

Title : Mechanical strength of ceramics with high clay content

Periodical : Stek. i ker. 11/3, 16-18, Mar 1954

Abstract : A study is made of the making of ceramic parts for various purposes, including the insulating parts of spark plugs. It is found that the larger the amount of crystallization of the material used, and the smaller the amount of the amorphous part remaining, the greater the strength will be, and that this end is attained by using a larger percentage of clay in the mixture and raising the temperature of firing. Figures are presented to prove these findings. One Russian reference; 1942. Graphs; tables.

Institution: .....

Submitted: .....

USSR/Scientists - Biography

Card : 1/1 Pub. 118 - 6/15

Authors : Polyakova, N. L. and Popova-K'yandskaya, E. A.

Title : Nikolay Dimitrievich Pal'chikov

Periodical : Usp. fiz. nauk 53/1, 121 - 136, May 1954

Abstract : A biographical sketch of Nikolay Dimitrievich Pal'chikov, a famous Soviet physicist is given together with a list of his works. Most of Pal'chikov's work dealt with geomagnetism, electro-chemistry, atmospheric optics, X-rays and radio-technics. Illustrations.

Institution : ...

Submitted : ...

Polyakova, N.L.

62 Dielectric losses of aluminum oxide. N. P. Bogoroditskiĭ and N. L. Polyakova. *Doklady Akad. Nauk S.S.S.R.* 95, 257–9(1954).—The reasons were studied for the variations in dielec. properties of the 3 cryst. modifications of Al_2O_3, the α modification, corundum, the β modification, a high-Al aluminate, and the γ-modification that is converted to the α modification by heating above 1000°. The low dielec. losses for corundum are explained by the ionic and electronic polarizations in the crystals, whereas in the β modification the structural polarization seems to predominate, owing to the loose lattice of the crystals. Variations in the dielec. properties of Al_2O_3 ceramic materials are attributed to the formation of β-Al_2O_3 during an oxidizing calcination. When calcined under reducing conditions, the β-modification is converted to the α, and the impurities are either volatilized or changed to a vitreous phase. W. M. Sternberg

(1)

POLYAKOVA, N.L.

Physics at Kharkov University from its founding to the Great October Socialist Revolution. Uch.zap.KHGU 60:5-50 '55. (MLRA 10:1)
(Kharkov University--History) (Physics)

POLYAKOVA, N.L.

Physics at Kharkov University from 1917 to 1930. Uch.zap.KHGU 60:57-62 '55. (MLRA 10:1)

(Kharkov, University--History)
(Physics)

15(2) SOV/72-59-11-10/12

AUTHORS: Bogoroditskiy, N. P., Polyakova, N. L., Eydel'kind, A. M., Prokhvatilov, V. G., Petrova, V. P.

TITLE: Wollastonite Raw Materials for the Ceramics Industry

PERIODICAL: Steklo i keramika, 1959, Nr 11, pp 32-38 (USSR)

ABSTRACT: In the Tadzhikskaya and Uzbekskaya SSR, rich deposits of this mineral have recently been found. Wollastonite $CaO \cdot SiO_2$ consists of 48.25% CaO and 51.75% SiO_2. As can be seen from the paper by D. S. Belyankin, V. V. Lapin, N. N. Toropov (Footnote 1), K. K. Kolobova in 1941 investigated the system $CaO-SiO_2$. Wollastonite has hitherto not been used in Soviet industry. The authors of the present paper studied the wollastonite rocks of the following three deposits: Kansay (Tadzhikskaya SSR), Lyangar (Uzbekskaya SSR), and Kalkkitekhdasskiy (Leningrad oblast'). According to the papers by M. Z. Kantor, V. P. Petrov (Footnote 2), this rock contains small quantities of diopside, garnet, quartz, and calcite. The chemical analysis of the wollastonite rocks of the three deposits is given in table 1. The results of the radiographical and microscopical

Card 1/2

investigations, as well as the investigation of the electric conductivity, are listed in table 2 for natural wollastonite, and in table 3 for synthesized wollastonite. Table 1 shows the dependence of the inclination tangent of the dielectric losses on the burning temperature of the raw materials. Figures 2-5 show microphotographs of wollastonite rocks and synthesized wollastonite, while figures 6-8 show X-ray pictures of these wollastonites. Furthermore, the electric and physico-mechanical properties of radioceramic materials made of wollastonite are given. Figure 9 represents the results of comparative examinations of the heat resistance of samples of steatite material and wollastonite. As can be seen from these results, the heat resistance of the wollastonite samples is much higher. Investigations showed that the wollastonite rocks from the Kansay and Lyangar deposits can be used as a raw material for the production of electrotechnical and other types of ceramics. There are 9 figures and 3 references, 2 of which are Soviet.

POLYAKOVA, N.L.; SMOLIN, P.P.; EYDEL'KIND, A.M.

Ironless talcites from the Kirgitey deposits. Stek. i ker. 17 no.9:28-33 S '60. (MIRA 13:9)

(Talc)

AM4036541

BOOK EXPLOITATION

S/

Bogoroditskiy, Nikolay Petrovich; Kal'mens, Natan Vladimirovich; Neyman, Moisey Isakovich; Polyakova, Natal'ya Lavrent'yevna; Rotenberg, Boris Abovich; Salitra, Dmitriy Borisovich; Afanas'yeva, Margarita Aleksandrovna; Fridberg, Illariy Dmitriyevich

Radioceramics (Radiokeramika). Moscow, Gosenergoizdat, 1963. 553 p. illus., biblio. 7000 copies printed.

TOPIC TAGS: electrical ceramic, electrical insulator, ceramic radio component, ceramic fabrication process

PURPOSE AND COVERAGE: This handbook is intended for technical personnel in the electrical-ceramics industry. It may also be used as a manual for students in higher polytechnical schools specializing in radio components and materials. The text covers the physicochemical and mechanical principles underlying the manufacture of ceramic radio components and gives a detailed description of all stages of production, including process flow sheets, GOST specifications, apparatus designations, and a classification of ceramic materials used in radio engineering. Modernization of the manufacturing

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processes, new materials, and automation are also mentioned. This book is the first Soviet handbook for the new "radio-ceramics" industry.

TABLE OF CONTENTS [Abridged]:

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PART V. MACHINING OF FIRED RADIO-CERAMIC PRODUCTS

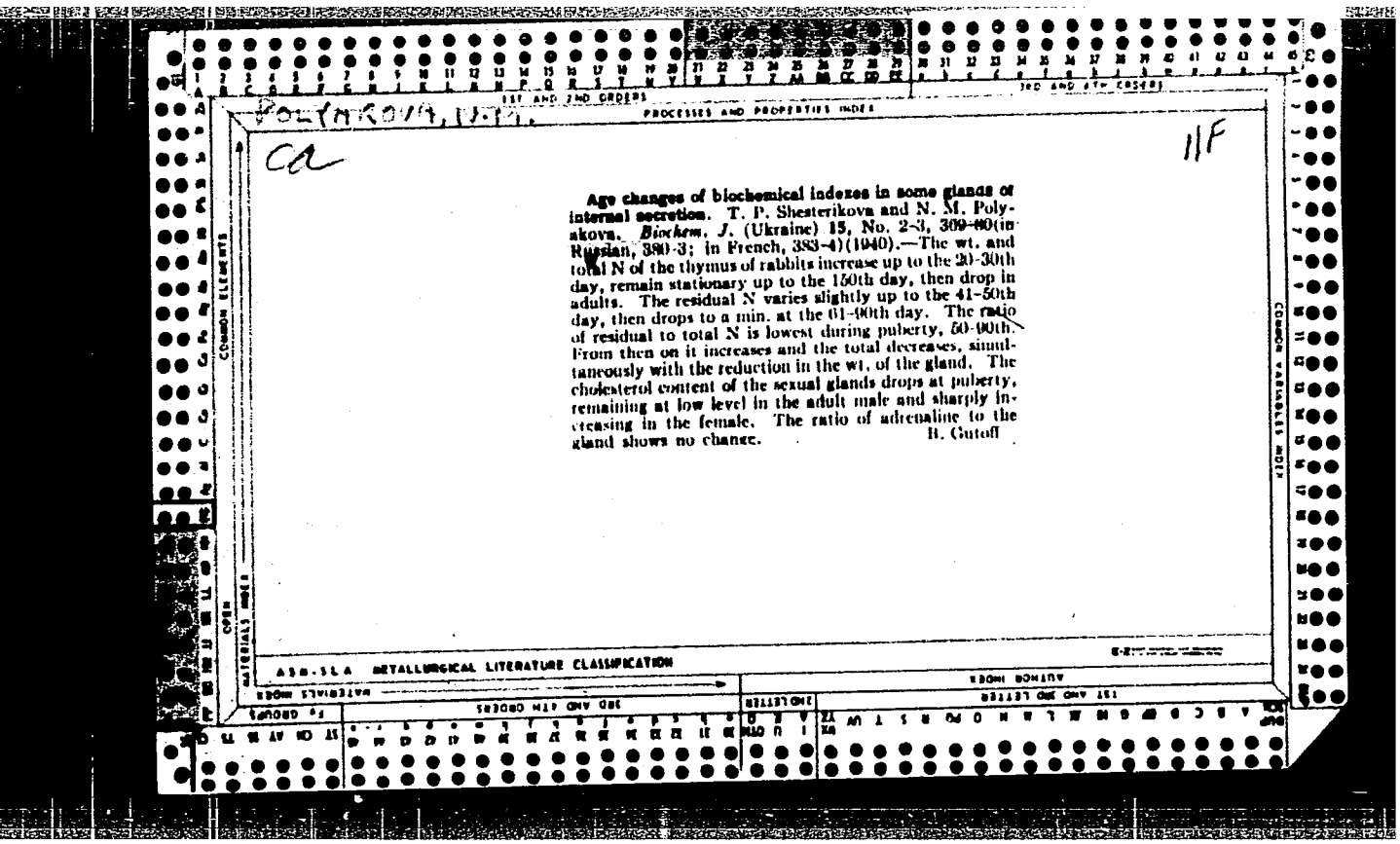
SUB CODE: MT SUBMITTED: 18May63 NO REF SOV: 208

OTHER: 043 DATE ACQ: 06Apr64

Card 4/4

BOGORODITSKIY, Nikolay Petrovich; KAL'MENS, Natan Vladimirovich; NEYMAN, Moisey Isakovich; POLYAKOVA, Natal'ya Lavrent'yevna; ROTENBERG, Boris Abovich; SALITRA, Dmitriy Borisovich; AFANAS'YEVA, Margarita Aleksandrovna; FRIDBERG, Illariy Dmitriyevich; Prinimala uchastiye MUDROLYUBOVA, L.P.; PASYNKOV, V.V., red.; ZHITNIKOVA, O.S., tekhn. red.

[Ceramic materials in radio engineering] Radiokeramika. Moskva, Gosenergoizdat, 1963. 553 p. (MIRA 16:12)
(Radio--Equipment and supplies)
(Electric engineering--Materials)
(Ceramic materials)



POLYAKOVA, V.P.

CA

11F

Age changes of biochemical indexes in some glands of internal secretion. T. P. Shesterikova and N. M. Polyakova. *Biochem. J.* (Ukraine) 15, No. 2-3, 369-80(in Russian, 380-3; in French, 383-4)(1940).—The wt. and total N of the thymus of rabbits increase up to the 20-30th day, remain stationary up to the 150th day, then drop in adults. The residual N varies slightly up to the 41-50th day, then drops to a min. at the 61-90th day. The ratio of residual to total N is lowest during puberty, 50-90th. From then on it increases and the total decreases, simultaneously with the reduction in the wt. of the gland. The cholesterol content of the sexual glands drops at puberty, remaining at low level in the adult male and sharply increasing in the female. The ratio of adrenaline to the gland shows no change. B. Gutoff

POLYAKOVA, N.M.

Aldolases of the brain. A. V. Palladin and N. M. Polyakova (Biochem. Inst., Acad. Sci. Ukr. S.S.R., Kiev, Ukrain. Biokhim. Zhur. 21, 341-9(1949); cf. Yezhegodnik Shkoly Akad. Nauk Ukr. R.S.R., 1947.—Enzymic preps. obtained from the brains of animals such as gophers, rats, rabbits, dogs, and horned animals have high aldolase activity. A higher activity was found for dog and horned-animal cerebellum and gray matter of the cerebral lobes than for white matter and medulla. Aldolase activity for the rabbit in earlier developmental stages was less than for mature animals. Brain homogenate (1:10) and a substrate of the Na salt of fructose-1,6-diphosphate (I) were used. The brain homogenate (1.2 ml. contg. 12 mg. tissue) was added to a reaction mixt. composed of 3 ml. acetate buffer of pH 6.7, 0.5 ml. of the Na salt of I, 0.5 ml. of 2% $NaHSO_3$, and 0.8 ml. of water, a total vol. of 6 ml. The samples were incubated at 37° for 1 hr., and 2 ml. of 10% CCl_3COOH was then added, the control being a sample immediately fixed with CCl_3COOH. After pptn. of the proteins, inorg. P and alkali-labile P were detd. after 20-min. hydrolysis at room temp. with 1N KOH. Inorg. P was detd. according to the Fiske-SubbaRow method (*C.A.* 20, 1062), and fructose according to Roe (*C.A.* 29, 1126⁶). Protein was detd. by H_2SO_4 digestion of the homogenate followed by colorimetric Winkler detn. C. F. H.

PALLADIN, A.V.; KHAYKINA, B.I.; POLYAKOVA, N.M.

Glycolysis and content of adenosintriphosphoric acid in stimulation of the central nervous system. Doklady Akad. nauk SSSR 84 no.4:777-779 1 June 1952. (CIML 25:4)

1. Academician for A. V. Palladin. 2. Institute of Biochemistry of the Academy of Sciences Ukrainian SSR, Kiev.

POLYAKOVA, N. M.

(5)

History of the investigation of the similarity of pepsin and rennin. A. V. Palladin, N. M. Polyakova, Ts. M. Shtutman, and K. O. Goncharova (Inst. Biochem. Acad. Sci. Ukr.S.S.R. Kiev.). *Ukrain. Biokhim. Zhur.* 25, 351–5 (1953).—A review with 8 references. —B. Gutoff

POLYAKOVA, N.M.

Nonsaponifiable substances of the brain. N. M. Polyakova. *Ukrain. Biokhim. Zhur.* 25, 409-16 (in Russian, 416-18)(1953).—Studies were made of the sterols of the nonsaponifiable portion of brain tissues of rabbits, dogs, and man. In the latter case the white matter and gray matter of the cerebrum were studied separately. The nonsaponifiable substance was dissolved in 2% dichloroethane and passed through a column of Al_2O_3 in an atm. of CO_2. The column was washed with 1000–1300 ml. of dry dichloroethane, the eluate being collected as separate fractions. The Al_2O_3 column was cut into sectional zones and the adsorbate removed with hot MeOH. The sectional zones were treated with a dichloroethane soln. of $SbCl_3$ and the nature of the ultraviolet fluorescence studied. The solvent was driven off on a water bath and in a current of CO_2. The residues were dried to const. wt. in desiccators. Detns. were made of m.p.; rotation in $CHCl_3$ soln.; spectrophotometric curves of the colored substances formed in the dichloroethane solns. upon addn. of the Liebermann-Burchard reagent, $SbCl_3$, and the Chugaev and Lifschitz reagent; fluorescent reaction in the presence of HNO_3; and ultraviolet spectrophotometric properties in EtOH soln. Results indicate the presence in the nonsaponifiable substances of a nonsterol fraction easily eluted with dichloroethane, a sterol fraction, and a fraction contg. substances not eluted by dichloroethane. Colorimetric detns. indicated also the presence of sterol oxidation products with double bonds in the B ring, as well as 7-hydroxycholesterol. The content of nonsaponifiable substances in the white and gray matter of the human cerebrum is 4.2 and 1.26% on a wet basis and 14.0 and 8.0%, resp., on a dry basis. Sterols (mainly cholesterols) constitute 93 and 85%, resp., of the nonsaponifiable substances. Small percentages of sterol oxidation products having double bonds in ring B are also present. Three other fractions having neg. sterol reactions and low m.ps. were also found in the white and gray matter of the human cerebrum. 7-Hydroxycholesterol was found in the gray matter only.

B. S. Levine

POLYAKOVA, N. M.

Nonsaponifiable substances of rabbit tissues. N. M. Polyakova and V. P. Vendt. *Ukrain. Biokhim. Zhur.* [illegible] (in Russian, 424-8(1953)).—Chromatographic studies were made of blood, liver, kidney, lung, and heart tissues of the rabbit. The nonsaponifiable substances can be divided into 3 major fractions: easily eluted, eluted with medium difficulty, and eluted with great difficulty. Fractions 1 and 3 consisted mainly of monsterols and 7-hydroxycholesterol; fraction 2 consisted mainly of sterols. In the 1st stages of elution there was also found a fraction consisting of easily volatilized substances. The percentage content of these fractions differs with the tissue type. Spectral absorption studies also indicated qual. and quant. differences in the different tissues.

B. S. Levine

PALLADIN, A.V.; POLYAKOVA, N.M.

Hexokinase in various parts of the brain and in various functional conditions. Doklady Akad. nauk SSSR 91 no.2:347-349 11 July 1953. (CLML 25:1)

1. Academician for Palladin. 2. Institute of Biochemistry, Academy of Sciences Ukrainian SSR.

POLYAKOVA, N. M.

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Chemical Abstracts
Vol. 48 No. 5
Mar. 10, 1954
Biological Chemistry

Study of the steroids of the brain by the chromatographic method. N. M. Polyakova. *Doklady Akad. Nauk S.S.S.R.* 93, 321-4(1953).—Human brain tissue (white and gray matter, separately) after sapon. with alc. KOH and extn. with Et_2O was subjected to chromatographic sepn. on Al_2O_3 using $(CH_2Cl)_2$ solvent, with elution of mechanically sepd. portions with MeOH. The zones were detected by the fluorescence method. The white matter contains 4.2% unsaponifiable matter, the gray 1.26% (14% and 8% on dry basis). The steroids comprise 90% of the former and 85% of the latter. The products contain various oxidation products of steroids with double bonds in the B ring. In addn., unidentified nonsteroid substances with low m.p. were isolated. The results are: the gray matter contains 0.02% oxidation products of steroids, 48% isomers of cholesterol, 36.8% cholesterol, 0.15% 7-hydroxycholesterol; the white matter, resp., 0.02, 47.3, 45.5, and 0. The 7-hydroxy deriv. was identified spectrographically.
G. M. Kosolapoff

Inst. Biochem., AS Ukr.SSR

GONCHAROVA, Yekaterina Yemel'yanovna; POLYAKOVA, Nina Mikhaylovna; SHTUTMAN, TSesya Markovna; SNEZHIN, M.I., redaktor; PALLADIN, A.V., akademik, redaktor; SIVACHENKO, Ye.K., tekhnicheskiy redaktor.

[Outline history of biochemistry in the Ukraine] Ocherki po istorii biokhimii na Ukraine. Vol. 1. [Pre-Revolution period] Dooktiabr'skii period. Pod red. A.V.Palladina. Kiev, Izd-vo Akademii nauk USSR. 1954. 56 p. [Microfilm] (MIRA 8:2)
(Ukraine--Biochemistry)

POLYAKOVA N.M.

(1)

Chromatographic investigation of unsaponifiable substances of some biological objects. V. P. Vendt and N. M. Polyakova. *Trudy Komissii Anal. Khim., Akad. Nauk S.S.S.R., Inst. Geokhim. i Anal. Khim.* 6, 202–12(1955); cf. *Ukrain Biokhim. Zhur.* 22, 144(1950).—The unsaponifiable substances obtained from brain, heart, liver, kidney, lungs, blood, skin, wool, and intestines were further sepd. chromatographically. The unsaponifiable substances from healthy rabbit organs resembled those from tumors of the same organs except in the case of the liver. In the unsaponifiable substances from liver tumors carotene and 7-dehydrocholesterol were absent. Al_2O_3 adsorbent, activated by heating at 700 for , was sifted through a silk screen with 16 openings per mm.^{2} $C_2H_4Cl_2$ was dried over Na_2SO_4 and distd. The activity of the adsorbent was controlled by manometric app. of V. and K. A crushed sample (50–100 g.) was refluxed 1/2 hr. with twice its amt. of 10% alc. KOH. The soln. was dild. to 2–3 times its vol. with H_2O, transferred to a separatory funnel, and extd. 4 times with 50 ml. portions of Et_2O. The combined exts. were washed with H_2O until neutral to phenolphthalein, dried 2–3 hrs. over Na_2SO_4 (10 g. Na_2SO_4/100 ml. ext.), and distd. in a CO_2 or N current. On a dry basis the % unsaponifiable material was: brain 12, heart 2.2, liver 1.7, kidneys 4.0, lungs 2.7, blood 1.7, skin 1.5, wool 0.73, and intestines 2.1. A 2 g. sample of the residue was dissolved in 100 ml. $C_2H_4Cl_2$ and passed through a column 300 × 26 mm. (contg. 75 g. Al_2O_3) under low pressure of CO_2. The wash liquid was $C_2H_4Cl_2$; 9–14 100 ml.-portions of filtrate were collected. The column of adsorbent was carefully pushed out. The 3–4 zones visible under ultraviolet light were sepd. and treated with boiling MeOH. The filtrates were distd. under N; the residues were weighed. Proportions of the residues were plotted against the no. of the fractions. The unsaponifiables from each organ were reported by vol. as % volatile, % easily displaced from adsorbent (residues from filtrates 1–3), % difficultly displaced (residues 10–12), and % middle fraction (residues 4–9). The absorption coeffs. of the reaction products obtained with Liebermann-Burkhard reagent for sterols were plotted. Residues 1–3 and 10–12 contained 7-hydroxycholesterol and non-sterols. The middle fraction was mainly sterols. Only in the case of unsaponifiable substances from blood, kidneys, and skin did the 8th residue contain non-sterols. Unsaponifiable substances from blood, brain, and skin contained 1 sterol oxidation product; other organs had 2 oxidation products. Appreciable amts. of carotene were found in blood and liver. Squalene was found in skin. Liver, wool, and skin contained 7-dehydrocholesterol. The coeff. of light absorption of a 1% EtOH soln. of each residue was detd. (220–300 mμ in a cuvette 1 cm. thick) with a SF-4 spectrophotometer.

Eurilla Mayerle

Inst-Biochemistry, AS USSR

POLYAKOVA, N.M.

Coordinating conference on biochemical problems of the nervous system. Ukr.biokhim.zhur. 27 no.1:126-127 '55. (MLRA 8:6)
(Kiev--Biochemistry--Congresses) (Nervous system)

POLYAKOVA, N. M.

MD

The effect of histamine shock upon the phosphorus metabolism of the cerebral cortex. N. M. Polyakova and N. I. Putilin (Inst. Biochem., Kiev). *Byull. Eksptl. Biol. i Med.* 40, No. 9, 47-50(1955).—An increase of inorg. P and decrease of adenosinetriphosphate and creatine phosphate follows histamine shock, which indicates a disturbance in the synthesis of the 2 latter substances. Injecting small doses of adenosinetriphosphate into the carotid artery, the femoral vein, or suboccipitally relieves the distressing symptoms. The blood pressure rises, and breathing and cardiac function become normal. A. S. Mirkin

(1)

POLYAKOVA, N.M

A study of the proteins of different sections of the nervous system by the method of paper electrophoresis. N. M. Polyakova (Inst. Biochem., Acad. Sci. Ukr. S.S.R., Kiev). *Ukrain. Biokhim. Zhur.* 28, 280-04(Russian summary, 204-5)(1956).—The study was limited to the sol. proteins of the sciatic nerve of the cat and to the sol. proteins of different sections of the nervous system of the cow. The isolated nerves were freed from blood, sheaths, and other adventitious matter, were comminuted and homogenized in an equal volume of physiol. saline, cooled to 2–4°, frozen with liquid air, and placed in the refrigerator overnight. The following day the neuro-homogenate was centrifuged. The supernatant (sol. proteins) was then adjusted to pH 8.6 with a veronal-medinal buffer and subjected to electrophoresis for 1 hr. at 240 v. by placing 0.03 ml. of the neuroprotein soln. on a strip of Whatman No. 1 filter paper. At the conclusion of the electrophoretic protein partition the filter paper was dried and sprayed with a soln. of amido-black 10 B as developer. For control purposes specimens of blood serum were treated in an identical manner. Among the sol. proteins of the soln. of the proteins of the white and gray matter of the cerebrum, cerebellum, medulla oblongata, and the spinal cord of the cow were found 7–8 protein fractions mainly of the globulin type, and a small quantity of proteins which migrated in the electrophoretic field at a rate characteristic to blood serum albumin. Different sections of the nervous system contained different percentages of the protein fractions. The white

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Polyakova, K. M.

matter of the spinal cord contained a protein fraction which migrated to the cathode. The electrophoretic study of the sol. proteins of the of the peripheral nerves (sciatic nerves of the cat and cow) showed the presence of a large quantity of protein substances, the migration of which was also similar to that of blood serum albumin. P. regards the last two types of protein electrophoretic migrations as important characteristics in distinguishing between the protein composition of the spinal cord and central (brain) nerve tissues. The composition of the sol. proteins of the roots of the spinal cord places them into a position between the white matter of the spinal cord and the peripheral nerves; the roots of the spinal cord also contain albumins but in quantities smaller than were found in the peripheral nerves. Both the roots and the peripheral nerves, were found to contain protein fractions which migrated in the direction of the cathode.

B. S. Levine

CARD 2/2

PALLADIN, A.V., akademik; POLYAKOVA, N.M.

Investigation of brain proteins by the method of electrophoresis upon paper. Dokl.AN SSSR 107 no.4:569-570 Ap.'56. (MLRA 9:7)

1.Institut biokhimii Akademii nauk Ukrainskoy SSSR, Kiyev.
(PROTEINS) (BRAIN) (ELECTROPHORESIS)

POLYAKOVA, N.M.

Electrophoresis of proteins of spinal nerves and nerve roots. Dokl. AN SSSR 109 no.6:1174-1175 Ag '56. (MLRA 9:11)

1. Institut biokhimii USSR, Kiyev. Predstavleno akademikom A.V. Palladinym.

(PROTEINS) (NERVOUS SYSTEM) (CATAPHORESIS)

BOLYAKOVA, NINA MIKHAYLOVNA

GONCHAROVA, Yekaterina Yemel'yanovna; [redacted], Nina Mikhaylovna; SHTUTMAN, TSesya Markovna; PALLADIN, A.V., akademik, redaktor; BRAGINSKIY, L.P., redaktor izdatel'stva; RAKHLINA N.P., tekhnicheskiy redaktor

[Biochemistry of the nervous system; a bibliography of Russian literature, 1868-1954] Biokhimiia nervnoi sistemy; bibliograficheskii ukazatel' otechestvennoi literatury, 1868-1954. Pod red. A.V.Palladina. Kiev, Izd-vo Akad.nauk USSR, 1957. 86 p. (MLRA 10:10)
(BIBLIOGRAPHY--NERVOUS SYSTEM)
(BIBLIOGRAPHY--PHYSIOLOGICAL CHEMISTRY)

POLYAKOVA, M.M.; GOTOVTSEVA, O.P.

Various methods of extracting proteins from the brain tissue and their separation by paper electrophoresis [with summary in English]. Ukr.biokhim.zhur. 29 no.4:400-408 '57. (MIRA 11:1)

1. Institut biokhimii AN URSR, Kiiv..
(PROTEINS) (EXTRACTION (CHEMISTRY))
(PAPER ELECTROPHORESIS)

Полякова, Н.М.

PALLADIN, A.V.; POLYAKOVA, N.M.; SILICH, T.P.

Comparative investigation of cerebral and neural proteins [with summary in English]. Fiziol.zhur. 43 no.7:611-618 Jl '57.
(MIRA 10:10)

1. Institut biokhimii AN USSR, Kiyev.
(BRAIN, metabolism,
proteins, comparison with nerve proteins (Rus))
(NERVES, metabolism,
proteins, comparison with brain proteins (Rus))
(PROTEINS, metabolism,
brain & nerves, comparison (Rus))

PALLADIN, A. V. and POLYAKOVA, N. M. Kiev USSR

"Zur Kenntnis der Proteine dDes Nervensystems."

report submitted IV INtl. Cong. of Biochemistry, Vienna, 1 - 6 Sep 1958.

PALLADIN, A.V.; POLYAKOVA, N.M.; GOTOVTSEVA Ye.P. [Hotovtseva, O.P.]

Effect of starvation on brain proteins. Ukr.biokhim.zhur. 30 no.3: 323-332 '58. (MIRA 13:3)

1. Institute of Biochemistry of the Academy of Sciences of the Ukrainian S.S.R., Kiyev.
(STARVATION) (BRAIN) (PROTEIN METABOLISM)

AUTHORS: Polyakova, N. M., Kabak, K. S. SOV/20-122-2-30/42

TITLE: On the Albumin of Peripheral Nerves (Ob al'bumine perifericheskikh nervov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 2, pp 275 - 277 (USSR)

ABSTRACT: In the course of their investigations of proteins from different sections of the nerve system by means of electrophoresis on paper (Ref 1) the authors found, that the peripheral nerves contain a considerable amount of proteins the electrophoric mobility of which is equal to the blood-serum albumin. Furthermore, such proteins are found which move towards the cathode in the case of electrophoresis. The content of these two kinds of proteins differentiates the peripheral nerves from the brain and the spinal marrow. First of all it had to be clarified whether the said albumin does not come from the lymph. The authors were able to prove that a considerable amount of albumin in the nervus ischiaticus does not come from the lymph present in the nerve trunk. Further it had to be proved that the said albumin is not

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On the Albumin of Peripheral Nerves

part of the connective tissue. Figure 2 shows the electrophoretic graphs of the proteins in the nervus ischiaticus of horned cattle. As can be seen albumins are present not only in the extracts of the connective tissue of the nerve but to the same extent in the extracts from isolated nerve fiber fasciculi. This content was nearly the same and varied between 20 and 25% of the total content of soluble proteins. The albumin moving towards the cathode in the case of electrophoresis is characteristic of the nerve fibers. There is no protein in the connective tissue (Fig 2). The albumin of the nerve resembles the blood serum albumin. There are 2 figures and 3 references, 2 of which are Soviet.

ASSOCIATION: Institut biokhimii Akademii nauk USSR (Institute of Biochemistry, AS UkrSSR) Kiyevskiy meditsinskiy institut (Kiyev Medical Institute)

PRESENTED: May 5, 1958, by A.V.Palladin, Member, Academy of Sciences, USSR

PALLADIN, A.V.; POLYAKOVA, N.M.

Agar-agar electrophoretic separation of soluble nervous tissue proteins. Ukr.biokhim.zhur. 31 no.3:307-313 '59.
(MIRA 12:9)

1. Institute of Biochemistry of the Academy of Sciences of the U.S.S.R., Kiyev.
(PROTEINS) (ELECTROPHORESIS) (AGAR)

POLYAKOVA, N.M.

Electrophoretic investigation of proteins of nonmedullated nerves and the sympathetic trunk and study of the properties of nerve albumin. Ukr.biokhim.zhur. 31 no.3:314-321 '59. (MIRA 12:9)

1. Institute of Biochemistry of the Academy of Sciences of the U.S.S.R., Kiyev.
(ELECTROPHORESIS) (PROTEINS) (NERVES)

POLYAKOVA, N. K., KIRSENKO, O. V., BELIK, YA. F., PALLADIN, A. V.

"The Distribution of Enzymes of Carbohydrate-Phosphorus and Nitrogen Metabolism Between Cellular Structures of the Brain Tissue."

report submitted for the First Conference on the problems of Cyto and Histochemistry, Moscow, 19-21 Dec 1960.

Institute of Biochemistry of the Academy of Sciences Ukrainian SSR, Kiev.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001342020004-5"

POLYAKOVA, N.M.

Proteins of the nervous system. Ukr.biokhim.zhur. 32 no.1: 120-148 '60. (MIRA 13:6)

1. Institute of Biochemistry of the Academy of Sciences of the Ukrainian S.S.R., Kiyev.
(PROTEINS) (NERVOUS SYSTEM)

BOLYAKOVA, N.M.; BELIK, Ya.V. [Bielik, IA.V.]; TSARYUK, L.A.

Proteinase in functionally different divisions of the central nervous system and different structural elements of brain cells. Ukr. biokhim. zhur. 32 no.5:623-635 '60. (MIRA 14:1)

1. Institut biokhimii Akademii nauk Ukrainskoy SSR, Kiyev.
(PROTEINASE) (BRAIN) (SPINAL CORD)

PALLADIN, A.V., akademik; POLYAKOVA, N.M.; MALYSHEVA, M.K.

Glutaminase concentration in different parts of the central nervous system and the cellular structures of the brain. Dokl. AN SSSR 134 no.5:1236-1239 O '60. (MIRA 13:9)

1. Institut biokhimii Akademii nauk USSR.
(GLUTAMINASE) (NERVOUS SYSTEM)

MALYSHEVA, M.K.; POLYAKOVA, N.M.; YEMCHUK, T.I. [Emchuk, T.I.], studenta

Purification and properties of brain adenosine deaminase. Ukr. biokhim. zhur. 36 no.3:323-333 '64. (MIRA 17:10)

1. Institut biokhimii AN UkrSSR, Kiyev.

POLYAKOVA, N.M., doktor biolog. nauk

First congress of the Ukrainian Biochemical Society. Vest. AN SSSR 35 no.9:113-114 '65. (MIRA 18:9)

MALYSHEVA, M.K.; POLYAKOVA, N.M.

Deamination of adenylic acid in cellular components of the brain tissue. Ukr. biokhim. zhur. 37 no.3:360-369 '65. (MIRA 18:7)

1. Institut biokhimii AN UkrSSR, Kiyev.

POLYAKOVA, N.M.; LISHKO, V.K.

Fractionation of soluble brain proteins. Ukr.biokhim.zhur. 34 no.1:10-22 '62. (MIRA 17:5)

1. Institute of Biochemistry of the Academy of Sciences of the Ukrainian S.S.R., Kiyev.

POLYAKOVA, N.M.; LISHKO, V.K.

Isolation and purification of brain proteinase. Ukr. biokhim. zhur. 34 no.2:208-216 '62 (MIRA 16:11)

1. Institute of Biochemistry of the Academy of Sciences of the Ukrainian S.S.R., Kiev.

POLYAKOVA, N.M.; MALYSHEVA, M.K.

Enzumes in different fractions of brain proteins, their localization and isolation by electropheresis on agar. Dokl. AN SSSR. 144 no.6: 1394-1397 Je '62. (MIRA 15:6)

1. Institut biokhimii Akademii nauk USSR. Predstavleno akad. A.V.Palladinym
(ENZYMES) (ELECTROPHORESIS) (BRAIN)

POLYAKOVA, N.M.; MALYSHEVA, M.K.

Adenosine deaminase and adenylic deaminase in different sections of the nervous system and different intracellular components of the brain; Ukr. biokhim. zhur. 33 no.5:713-731 '61. (MIRA 14:10)

1. Institut biokhimii Akademii nauk Ukrainskoy SSR, Kiyev.
(ADENOSINE DEAMINASE) (ADENYLIC DEAMINASE)
(NERVOUS SYSTEM)

POLYAKOVA, N.M.; UNTINA, N.A.

Phosphoglucomutase in various sections and interstitial structures of the brain. Vop. med. khim. 7 no.5:524-527 S-O '61. (MIRA 14:10)

1. The Institute of Biochemistry of the Academy of Sciences of the Ukrainian S.S.R., Kiev.
(BRAIN) (PHOSPHOGLUCOMUTASE)

POLYAKOVA, N.M.

Work practice in creating more hygienic working conditions for railroad workers. Vrach.delo no.9:979-981 S '57. (MLRA 10:9)

1. Zdravpunkt depovoznogo depo st. Stanislav.
(RAILROADS--EMPLOYEES--DISEASES AND HYGIENE)

POLYAKOVA, N. M., KIRSENKO, O. V., and PALLADIN, A. V.
(USSR)

"Enzymes from the Structures of Brain Cells."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 Aug 1961

GOSTINTSEV, K.K.; POLYAKOVA, N.N.

"Gatchettite" and evenkite from the Suchan coal basin. Trudy VNIGRI no.227 Geokhim.sbor. no.9:112-118 '64. (MIRA 18:1)

CA

11H

Motor activity of various stomach regions and reaction of their muscles to adrenaline and acetylcholine in normal and epinephrectomized frogs. N. N. Polyakova (Leningrad State Univ.). *Fiziol. Zhur. S.S.S.R.* 36, 872-9(1950).—Pyloric smooth muscle has the highest order of automatic contraction and the activity falls as one approaches the gastric inlet. Adrenaline (10^{-6} concn.) gives a 2-phase reaction; stoppage of automatic motor action, followed by supernormal action. Acetylcholine (3×10^{-6} concn.) immediately increases the automatic activity and heightens the muscle tone. Removal of the adrenals lowers the motor activity and eventually stops it, the pyloric region being affected first; adrenaline in the 1st phase of its action may increase the tone of the muscle, but the 2nd, active phase is not observed. The acetylcholine action is lowered but its character is unchanged. G. M. Kosolapoff